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JOHNSON & MALHOTRA, P.C.
ENVIRONMENTAL ENGINEERS

MEMORANDUM

DATE: April 30, 1987

TO: Don Josif, U.S. EPA

FROM: David P. Edwards, CCJM DE

SUBJECT: Illinois/FIL0335HR
Alton/Alton Municipal Landfill
ILD980497614

This memorandum is in response to comments submitted by the U.S. EPA regarding the Hazard Ranking System (HRS) Report prepared by Ecology & Environment/FIT for the Alton Municipal Landfill site.

C.C. Johnson & Malhotra/FIT has reviewed these comments, taken them into consideration, and prepared the following response.

The U.S. EPA indicated that the local well logs (Ref. 8) do not support statements made regarding permeability of the unsaturated zone. Further review of this information indicates that, although local well logs show several feet of clay between the ground surface and the aquifer of concern, the initial interpretation is sound. The landfill is located in an abandon clay pit, which originally extended to a depth of 70 to 80 feet below ground surface (Ref. 10, p. 1 & Ref. 5, p. 1). The pit cut completely through the glacial drift deposits and into the underlying bedrock (Ref. 5). A number of contact springs, which flowed from a thin sand bed in the glacial drift, were observed along the walls of the clay pit (Ref. 5). These springs developed as a direct result of the pit cutting through the drift aquifer; therefore, when the unlined pit was filled with waste, the waste was in direct contact with the drift aquifer. This direct connection between the waste and the aquifer of concern indicates that, in effect, there is no unsaturated zone at the site and that the highest permeability value should be assigned (Ref. 1, 47FR31224). Although the HRS report was left unchanged, this memorandum should clarify statements regarding permeability of the unsaturated zone (pages 3 and 3A).

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